



Obesity in the UK: A Review and Comparative Analysis of Policies within the Devolved Regions

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About this Report

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Contents

Executive Summary	1
Part 1: Introduction	
1.1. Obesity: a priority issue	3
1.2. Causes of obesity	3
1.3. Consequences of obesity	3
1.4. Policy Responses to Obesity	4
1.5. Tackling Obesity in the UK	5
1.6. Appendix 1 - Tables	6
Part 2: Obesity Prevalence Rates in the UK	
2.1. Introduction	8
2.2. Obesity in England	8
2.3. Obesity in Northern Ireland	9
2.4. Obesity in Scotland	10
2.5. Obesity in Wales	10
2.6. Summary Obesity Prevalence in the UK	11
Part 3: A review and a comparative analysis of obesity-related policies in the UK	
3.1. Methods	12
3.2. Background	12
3.3. Obesity on the Policy Agenda	12
3.4. Obesity Strategies	13
3.5. A Framework for Analysis	14
3.6. Analysis of Interventions to Tackle Obesity	19
Part 4: Summary and Recommendations	28
Appendix 2: Policy Documents Reviewed	30
References	34

Executive Summary

Introduction

Obesity is the excessive or abnormal accumulation of fat to the degree that health may be impaired. Globally, there have been significant increases in obesity prevalence rates over the last 20 years. Within the UK, English obesity prevalence rates in adults have increased by three- to four-fold since the 1980s. Because of the complexity of the causes and drivers of obesity, how to combat it presents significant public health challenges.

The consequences of obesity are well known. Obesity is not only associated with chronic conditions such as type II diabetes, coronary heart disease and some cancers, it also has social (discrimination and bias), psychosocial (low self-esteem, anxiety and depression) and economic (direct healthcare and other associated costs) consequences. Thus, in many countries, including those in the UK which are faced with the obesity epidemic, tackling it has become a public health priority.

In the UK, following asymmetric devolution in 1998, the responsibilities for formulating and enacting public health policies (among other areas such as education and agriculture) are now under the auspices of the constituent countries of the UK (England, Northern Ireland, Scotland and Wales). Accordingly, public policies to address obesity have been formulated and implemented by the devolved regions.

Devolution can present challenges for a comprehensive and coherent policy response for the UK in tackling obesity, but it also presents the scope for independent policy action within the devolved regions. The ability of the devolved regions to explore separate policy responses in addressing obesity provides opportunities for learning and for making comparisons.

Obesity Prevalence Rates

A challenge to directly comparing the prevalence rates of obesity between populations in all the devolved regions is presented by the unavailability of comparable data. As there is no UK-wide obesity population survey that is undertaken, the devolved regions use different methods for collecting data and at different time intervals.

The most recent available data from England and Scotland indicate obesity prevalence rates are similar in men and boys at 22 percent and 18 percent respectively. The obesity prevalence rate in Scottish women is 19 percent higher than in English women (26 percent compared to 21.9 percent). Among girls, the prevalence rate of obesity is 30 percent higher in England (18.1 percent) than in Scotland (13.8 percent).

Obesity prevalence rates for Northern Ireland are slightly higher than those in England with 25 percent of men and 23 percent of women being obese. Wales has the lowest prevalence rates. Among adults, 17 percent of men and 18 percent of women are obese. It should be noted that obesity prevalence rates from Northern Ireland and Wales should be treated with caution as these data are gathered using self-administered questionnaires which underestimate prevalence rates. In contrast, in England and Scotland, actual measurements of height and weight are taken.

A review and comparative analysis of policy responses to obesity

Obesity has been on the policy agenda since the early 1990s (prior to devolution) and of the UK devolved regions, only England has a population-wide obesity strategy for tackling obesity. Obesity, however, is a priority on the policy agendas in all the other devolved regions and interventions to address it are documented in public health policy documents, diet and nutrition and/or physical activity strategies.

A key difference in policy responses to obesity in the devolved regions has been in the setting of obesity related targets. England has a target to reduce the prevalence rate of childhood obesity. In addition to setting a childhood obesity target, Northern Ireland has also set a target for population level obesity. In contrast, Wales and Scotland have not set obesity related targets.

While not all the devolved regions have set obesity targets, they have all set diet and nutrition as well as physical activity targets with the aim that these may contribute to reducing obesity, among other health benefits. Diet and nutrition-related targets are set with the objectives of decreasing the intake of non-milk extrinsic sugars and salt among the population. They also aim to increase the consumption of fruit and vegetables. Interestingly, Wales also set targets to measure changes in knowledge and attitudes regarding food and nutrition. While all devolved regions have set targets to increase physical activity, England has set the most ambitious target of having 70 percent of adults meeting the recommended levels of activity by 2020.

Policy documents from all regions have identified social marketing as a key tool that can be used to raise awareness among the general public regarding obesity. However, not all devolved regions have launched social marketing based campaigns. Community-based programs to improve cooking skills among adults are being provided.

Most policies addressing obesity in all the devolved regions have been targeted at preventing childhood obesity and have focused on the school environment. While similar interventions are in place in all regions, the differences lie in when interventions were introduced. With regards to improving school meals for example, Scotland took the lead and England, Wales and Northern Ireland subsequently followed with similar efforts. The workplace is also recognised as a setting through which health promoting programs which support employees could be provided. A key theme that emerged in policy documents was to have in place workplace award schemes, which would highlight good practices.

All devolved regions consider built environments which provide opportunities for engaging in physical activity to be essential in combating obesity. Making communities more 'walk-able' and pedestrian-friendly is advocated as is promoting the use of alternative transport such as cycling. The review did not identify any major differences in the regions to the approaches being promoted to improve the built environment and transport.

In view of the magnitude of the obesity epidemic in the UK, devolved regions which have not already done so should consider to have in place national strategies to tackle the issue. A further recommendation is made to have a UK-wide strategy which would serve as a complement to the devolved regions' strategies. Throughout the UK, broader comprehensive approaches which extend beyond the prevention of childhood obesity and encompass prevention and treatment across the life-course are urgently needed.

Part 1: Introduction

1.1. Obesity: a priority issue

Globally, population obesity and overweight (defined as 'abnormal or excessive fat accumulation that may impair health', WHO, 2006a) have increased to epidemic proportions and present significant public health challenges in the 21st century. In Europe, for example, the prevalence rate has tripled in the last two decades (WHO, 2007a).

Within the UK, English obesity prevalence rates in adults have increased by three- to four fold since the 1980s (Canoy and Buchan, 2007). Moreover, the rising trends in obesity show no signs of abating. The recent Government Report, *Tackling Obesities: Future Choices*, has projected that by 2050, 60 percent (a 2.5 fold increase from current levels) of the population could be obese if current trends persist (Government Office for Science, 2007).

Perhaps most worrying about the rising obesity prevalence rates, has been the rapid increase in childhood obesity. In England, prevalence rates among five to ten year old boys rose by more than 300 percent from 1.8 percent to 6.0 percent from 1972 to 2002/3 (Canoy and Buchan, 2007). Over the same period and within the same age band, prevalence rates among girls increased by 500 percent from 1.3 percent to 6.6 percent (Canoy and Buchan, 2007).

Faced with these alarming increases in the proportion of individuals who are obese and overweight, and the growing awareness of the severe consequences of the obesity epidemic for health-related and economic costs that extend beyond health care systems, tackling obesity has become a public health priority in many of the countries faced with the epidemic, including those of the UK.

1.2. Causes of obesity

Obesity arises when caloric intake exceeds caloric expenditure. However, the drivers of the obesity epidemic are extremely complex, as laid out in the *Tackling Obesities: Future Choices* report (Government Office of Science, 2007). Genetic, psycho-social and environmental factors (relating to food and physical activity) contribute to overweight and obesity.

A widespread consensus now recognises the rapid rise in population obesity levels has predominantly been a result of social, environmental and technological changes over the last three or four decades. These changes have led to individuals living in environments which promote excessive caloric intake while they simultaneously decrease opportunities and requirements for engaging in physical activity.

Factors which may decrease the risks of overweight and obesity include taking part in regular physical activity and having home and school environments which support healthy food choices for children. Sedentary lifestyles and heavy marketing of energy dense foods and fast food outlets on the other hand, increase the risks of overweight and obesity. A WHO/FAO (2003) report has summarized the strength of evidence on the likelihood of these and other factors in decreasing or increasing the risk of overweight and obesity (Table 1, Appendix 1).

1.3. Consequences of obesity

The consequences of obesity are well known. Obesity is associated with:

- chronic conditions such as type II diabetes, coronary heart disease, cancers of the breast, endometrium and colon, orthopaedic disorders and osteoarthritis (Kopleman, 2007),

- social consequences, such as discrimination and bias (Puhl and Bronwell, 2001),
- psychosocial consequences such as lower self-esteem, emotional distress, anxiety and depression,
- economic consequences for both the healthcare sector, and the wider economy. The economic consequences of obesity involve both direct (e.g. preventive, diagnostic, and treatment services related to obesity) and indirect costs (e.g. income lost from decreased productivity, restricted activity, absenteeism).

In England, the House of Commons Health Select Committee (2004) estimated that in 2002, the economic costs of obesity and its consequences were £3.3 -3.7 billion. However, this is likely to be an underestimate as the effects on employment are greater than previously thought and social care costs were not considered (McCormick and Stone, 2007). It is projected that by 2050 the overall health services costs of obesity and overweight will be £45.5 billion (at today's prices) if the ratio of total costs of overweight and obesity to direct health service costs remains similar to the current ratio of 7:1 (Government Office for Science, 2007).

1.4. Policy Responses to Obesity

A change in the fundamental approach that policymakers are using to tackle obesity is underway in many countries. To date, 'downstream' approaches or measures focusing on individual behaviour have been largely used in efforts to stem the rise in obesity. However, such 'downstream' interventions have been to a great extent ineffective. While it is acknowledged that individuals are ultimately responsible for their health behaviours, it is now being recognised by policymakers that personal choices are always made in the context of a larger environment. Accordingly, an important complement to anti-obesity programs and interventions is a multifaceted or 'upstream' public health policy approach, which directly addresses the context of this larger environment.

Public health policies are increasingly required to address the many behavioural, socio-cultural and environmental factors that promote excess caloric intake and discourage physical activity in what have been termed 'toxic' or 'obesogenic' environments (Swinburn et al, 1999; Nestle and Jacobson, 2000: Government Office for Science, 2007).

Ranging across a spectrum of policy spheres at the macro and micro levels, the existing obesity policy environment has been described as a 'policy cacophony' in which the 'noise is drowning out the symphony of effort' (Lang and Raynor, 2007). This 'policy cacophony' can be attributed to at least five factors:

First, obesity policy is 'weighed down' by its complexity and the existence of many theories about the causes and drivers grounded in a number of disciplines including physiology, economics, psychology and sociology. Each of these theories presents different options for action by policy makers and leads to confusion, caution and, possibly, inaction (see Table 2, Appendix 1) (Lang and Rayner, 2007).

Second, a challenge to policy formulation and implementation is presented by the existence of multi-level governance structures on issues related to obesity ranging from the global, to European, national, regional and local. For example, the EU Common Agricultural Policy, through the provision of financial support in the form of subsidies, promotes the production of dairy and meat over fruit and vegetable production. This has been shown to influence the contents of the UK family shopping basket (Faculty of Public Health, 2007). This means that policies intended to have lasting changes on the availability and price of fruit and vegetables must take account of changes needed at the EU level.

Within the UK, devolution has added another level of governing complexity with the creation of new structures of governance, resulting in the decentralisation and dissipation of policies to tackle obesity. For example, the setting of nutritional standards in schools (which have occurred along different timelines) has been at the devolved region level, while interventions to curb advertising of junk food to children have taken place at the UK level.

Third, there is reluctance to adopt interventions that could be seen to be impinging on the rights of freedom of choice of individuals, particularly on their lifestyles. There have been contentious debates in the UK about the role of government in a number of public health spheres, such as that leading up to the ban on smoking in public spaces. The repeated attacks on the 'nanny state' has made government more cautious in implementing public health policies which may be viewed as more attempts by government to control the lifestyles of individuals.

Fourth, there is the lack of interventions which would bring about quick results and therefore concrete identifiable results for politicians who need to retain public support for potentially intrusive policies. The rise in population level obesity to current levels has been a process that has occurred over the last three to four decades and which many commentators say will take at least as many decades to have in hand. Obesity policies are necessarily long-term, operating on different timescales to the political cycle, making it more difficult for public health campaigners to secure the interests of politicians confronting short-term political contests.

Finally, there is a lack of evidence on what interventions are actually effective at a population level. In almost all countries in the world, obesity has been on the rise and, to date, no country has been able to stem this increase. This lack of available evidence on what policy measures are effective at halting the rise of obesity of entire populations has contributed to the inertia and 'policy cacophony'.

1.5 Tackling Obesity in the UK

Asymmetric devolution in 1998 in the UK has meant the responsibilities for formulating and enacting public health policies are under the auspices of the constituent countries of the UK (England, Northern Ireland, Scotland and Wales) (Table 3, Appendix 1). Accordingly, public policies to address obesity have been formulated and implemented by the devolved governments.

This devolved approach creates both an added layer of complexity (as discussed above), but also an opportunity for new centres of policy entrepreneurship together with more direct means of implementation. Containing populations which are broadly similar, albeit which have regional differences, devolution allows for the exploration of the obesity policy directions the different UK regions have taken; thus providing opportunities for policy learning and comparison.

Recognising such opportunities, the objectives of this report are two-fold. The first objective is to review the evidence on what is known about the prevalence rates of obesity in the devolved regions, and to distinguish whether there are significant differences in the adult population, as well as in children. The findings of this review are presented in **Part 2**.

The second objective of the research is to review and comparatively analyse the policy responses to obesity in the UK devolved regions in order to identify and explore the lessons and insights that can be learned. The findings are presented in **Part 3**.

Part 4 presents a summary and recommendations for future actions for the devolved regions and the UK as a whole.

Appendix 1:

Table 1: Summary of strength of evidence on factors that might promote or protect against weight gain and obesity^a

Evidence	Decreased Risk	No Relationship	Increased Risk
Convincing	<ul style="list-style-type: none"> - Regular physical activity - High dietary intake of NSP (dietary fibre)^b 		<ul style="list-style-type: none"> - Sedentary lifestyles - High intake of energy dense micronutrient-poor foods^c
Probable	<ul style="list-style-type: none"> - Home and school environments that support healthy food choices for children - Breastfeeding 		<ul style="list-style-type: none"> - Heavy marketing of energy dense foods and fast food outlets - High intake of sugars, sweetened soft drinks and fruit juices - Adverse socio-economic conditions^d (in developed countries, especially for women)
Possible	Low glycaemic index foods	Protein content of the diet	<ul style="list-style-type: none"> - Large portion sizes - High proportion of food prepared outside the home (developed countries) - 'Rigid restrain/periodic disinhibition' eating patterns
Insufficient	Increased eating frequency		Alcohol

Adapted from WHO (2004)

^aStrength of evidence: the totality of the evidence was taken into account. The World Cancer Research Fund schema was taken as the starting point but was modified in the following manner: randomized controlled trials were given prominence as the highest ranking study design (randomized controlled trials were not a major source of cancer evidence); associated evidence and expert opinion was also taken into account in relation to environmental determinants (direct trials were not usually available).

^bSpecific amounts will depend on the analytical methodologies used to measure fibre.

^cEnergy-dense and micronutrient-poor foods tend to be processed foods that are high in fat and/or sugars. Low energy-dense (for energy dilute) foods, such as fruit, legumes, vegetables and whole grain cereals, are high in dietary fibre and water.

^dAssociated evidence and expert opinion included.

Table 2: The policy implications of some key obesity theories

Theory	Core argument	Implied solutions
Genetic causation	The predisposition to lay down fat is an evolutionary legacy	Genomics, gene mapping and nutrigenomics. Functional foods might help play a part in tailoring diets to individual predispositions
Economic transition	Lifestyle change is associated with development of a post-industrial consumerist society	Once sufficiently affluent, people will be able to tackle obesity as consumers, choosing or not, as they wish. At the micro level, fiscal measures such as 'fat taxes' could be considered
Technological change	Oil as a source of energy is replacing food as source of energy	Build in more physical energy use into daily life. Design technology to help keep intake in balance with expenditure
Cultural change	Marketing and advertising instils new cultural norms about what and how to eat, and how much to eat	Social marketing can emulate 'business' marketing
Psychosocial	Food choice is intensely personal and expresses identity. Obesity suggests a schism within identity well-being	Family change. Counselling. This is required both individually and on a mass scale
Obesogenic environment	Obesity is a normal physiological response to an abnormal or inappropriate environment	Change the physical and dietary environments to allow normal physiological balance to (re)emerge
Nutrition transition	Rising income leads to dietary changes, leading to shifts in disease patterns	It is probably too late to prevent rising obesity

Adapted from Lang and Rayner (2007)

Table 3: Institutions managing UK policy and areas of devolved government

	UK	England	Scotland	Northern Ireland	Wales
Parliament	House of Commons (646 members: 529 English, 59 Scotland, 40 Wales, 18 Northern Ireland)	None though English affairs dominate the House of Commons	Scottish Parliament - 129 members	Northern Ireland Assembly - 108 members	National Assembly of Wales - 60 members
Population	59 million	48 million	5.1 million	1.64 million	2.9 million
Transfer of powers	The areas listed to the right have been ceded to national administrations across the UK	Addressed through the UK parliament (Scottish, Welsh and Northern Irish members vote on English matters)	Agriculture, fisheries, forestry, economic development, education and training, environment, health, home affairs, local government, sport and the arts, statistics, transport	Agriculture and rural development, environment, regional development, social development, education, enterprise, trade and investment, health, social services and public safety	Agriculture, economic development, education, environment, health, social services, local government, arts, culture and the Welsh language

Adapted from Smith and Babbington (2006)

Part 2: Obesity Prevalence Rates in the UK

2.1. Introduction

In adult populations and individuals, obesity is typically assessed using the body mass index (BMI, kg m^{-2})¹. However, it should be noted that while BMI is a useful measure for population-level overweight and obesity, for individuals it is an imprecise measure. This is because individuals with the same BMI may have different levels of body fat content. More recently, research suggests that waist circumference is more closely associated with mortality and morbidity than BMI (Price *et al*, 2006).

In children, defining overweight and obesity is further complicated by the fact that height and weight continue to change as children grow. Therefore, applying measures of BMI directly as used with adults is less reliable. Different methodologies are used for measuring childhood obesity and an international standard has been proposed (Cole *et al*, 2000).

Obesity has been found to vary within populations as a function of sex, age, ethnicity and socioeconomic class, among other factors. Obesity prevalence rates are typically higher in women than men. Age is a significant risk factor since individuals are likely to become more obese as they grow older, with the slowing of the metabolism and decreased participation in physical activity. Some ethnic groups are likely to be more (or less) obese and overweight than others. In most high income countries, those in higher socio-economic groups tend to have lower prevalence rates than those in lower socio-economic groups. This particularly holds true for women.

With childhood obesity, the risks of being obese are much greater if one or both parents are obese. Prevalence is about 20-40 percent for children with one obese parent, and 80 percent if both parents are obese (Medical Research Council, 2007).

According to the WHO Europe Regional database, in the UK, 62.3 percent of adults (those aged 16 and over) are overweight, i.e., BMI >25. Of these overweight adults, 24.4 percent are obese (WHO, 2007a). However, in the UK, data on health (including overweight and obesity) are collected separately in the devolved regions and there is no single UK-level obesity surveillance survey that is undertaken. For these and other reasons, a complex picture emerges when reviewing the prevalence rates of obesity in England, Northern Ireland, Scotland and Wales.

2.2. Obesity in England

Gender differences

Of all the devolved regions, England has the most comprehensive data available on obesity. In most countries in the world, there is a clear gender difference in obesity prevalence rates with more women than men being obese. Until very recently, England had followed a similar trend. The most recent available data, however, suggest the prevalence of obesity in men is now similar to that in women.

Data from the 2005 Health Survey for England (in which actual height and weight measures are taken, Office of National Statistics, 2006) indicate that 65.5 percent of adult males (16 years and older) are overweight (including obese) while 22.1 percent are obese. Prevalence rates for women are similar with a slightly lower proportion (64.8 percent) being overweight

¹ The BMI range for normal weight is 18-25 kgm^2 ; overweight is 25-29 kgm^2 ; obese is 30-40 kgm^2 and morbidly obese is >40 kgm^2 . In this report, unless specified, overweight measures include all BMI levels of 25 and above.

and a slightly lower proportion (21.9 percent) being obese. However, the increase in obesity in men is projected to have a steeper rise than that in women over the next few years. Consequently, for the first time, more men than women will be obese in England (Department of Health, 2006).

Socio-economic class

Individuals in higher socio-economic groups such as those with managerial and professional employment generally have lower obesity and overweight rates than those in semi-routine and routine positions. This disparity is especially prominent among women, where obesity rates in the semi-routine and routine positions are almost double those of women in managerial or professional positions (Office of National Statistics, 2003).

Minority ethnic groups

Obesity prevalence rates are also higher (and lower) in some ethnic groups in comparison to the general population. In 2004, among the ethnic minority groups, Black Caribbean and Irish men had the highest prevalence of obesity (25 percent each) compared to the 23 percent in the general population. For women, obesity prevalence was higher in Black African (38 percent), Black Caribbean (32 percent) and Pakistani ethnic groups (28 percent) and lower in Chinese women (8 percent) than for women in the general population (Office of National Statistics, 2004).

Age

Overweight and obesity rates vary significantly as a function of age in both men and women. This is partly because of a natural progression in the increase in body weight with ageing. Data from the 2005 Health Survey for England indicate overweight and obesity levels peaked in individuals between 55-74 years of age with 77.4 percent of adults being overweight or obese compared to the general population rate of 65 percent. At older ages (beyond 74), obesity and overweight begin to decline. This can be attributed to premature mortality of overweight and obese individuals compared to individuals who have ideal weights.

Children

Trends in obesity prevalence rates among children in England showed a significant increase between 1995 and 2005. Among boys and girls aged 2-15, the proportion of those who were obese increased by more than 65 percent from 10.9 to 18 percent and by 50 percent from 12 to 18.1 percent respectively (Office of National Statistics, 2006). Childhood obesity increases with age, with children in higher age groups more likely to be obese than those in lower age groups. Furthermore, there is a clear relationship between childhood obesity and socio-economic status with children from deprived areas more likely to be obese than those in the least deprived areas.

2.3. Obesity in Northern Ireland

Adults and Children

Data from the Northern Ireland 2005/2006 Health and Social Wellbeing Survey (Department of Health, Social Services and Public Safety, 2007) reveal that 59 percent of adults were overweight (including obese). Men were more likely to be overweight (including obese) at 64 percent than women at 54 percent. Slightly more men (25 percent) were obese compared to women (23 percent).

With regards to children, 36 percent of those aged 2-15 were overweight (including obese) with 20 percent of boys being obese while 15 percent of girls were obese.

It should be noted that these data are based on self-reported measures and are unlikely to reflect accurate levels of obesity and overweight. It is well known that obesity prevalence rates measured using self-reported questionnaires underestimate true prevalence rates as individuals tend to underestimate their weight and/or overestimate their heights.

2.4. Obesity in Scotland

Gender differences

Population obesity levels in Scotland are gathered using a methodology similar to that in England in which actual measurements of weight and height are recorded. Data from the most recent Scottish Health Survey (2003) indicate that more men (65 percent) than women (60 percent) are overweight (including obese). However, more women (26 percent) than men are obese (22 percent). In particular, there are twice as many morbidly obese (BMI>40) women (3.4 percent) compared to men (1.6 percent).

Socio-economic class and income

Similar to the findings in England, obesity prevalence rates vary as a function of employment with both men and women in professional or managerial households least likely to be obese or overweight. Interestingly, men in the highest income households were *more* likely than those in the lowest to be overweight or obese (70 percent and 53 percent respectively). This was also true for the prevalence of obesity (21 percent vs. 16 percent).

Among women, there were no large differences in prevalence of overweight including obesity by income. There were, however, large differences by income in the prevalence of morbid obesity, which was around three times higher among women in the lowest income households than in the highest income households.

Age

In analysing obesity data from Scotland, it was found that *age* was the factor most strongly associated with being overweight or obese in both men and women. Obesity (including overweight) peaked at 80 percent between the ages of 55-64 before declining. Using a reference group age of 16-24, the odds of men being overweight or obese increased, progressively peaking at 5.68 times higher in those aged 55-64. The odds were still 2.33 times higher among those aged 75 and over. A similar pattern was observed for women although the relative size of the odds ratios were smaller for each group than was the case for men, the highest being 3.77 for women aged 65-74 years.

Children

Overweight and obesity prevalence rates for boys and girls (aged 2-15) indicate more boys (34.6 percent) being overweight (including obese) than girls (30 percent). Furthermore, more boys are obese than girls, unlike the pattern observed in adults where more women are obese compared to men.

2.5. Obesity in Wales

The most recent data on obesity prevalence rates in Wales is from the Welsh Health Survey of 2003/04. The Welsh Health Survey uses self-reported questionnaires for assessing obesity prevalence. While more men (59 percent) than women (49 percent) are overweight (including

obese) the proportion of those who are obese is similar at 17 percent and 18 percent respectively.

For childhood obesity prevalence rates, a health behaviour self-reported survey of 15 year old school children found 22 percent of boys and 17 percent of girls were obese (Health Behaviour in School-aged Children (HBSC) survey 2001/02 (2004).

2.6. Summary Obesity Prevalence in the UK

Data on both adults and children in the four nations of the United Kingdom show significant prevalence rates of overweight and obesity. However, a clear picture of the obesity epidemic in the UK is undermined by the variable quality of available data, which inhibits any truly reliable comparison of obesity prevalence rates in the four countries.

In particular, data for England and Scotland use actual measurements of height and weight. In Wales and Northern Ireland, less-reliable self-administered questionnaires - which are known to result in underestimation of prevalence - are used to collect obesity data.

In the two countries where comparisons can be made with relative confidence, England and Scotland, overweight (including obesity) and obesity-only prevalence rates are similar in men at about 65 percent and 22 percent respectively. In boys, obesity prevalence rates are the same at 18 percent. The obesity prevalence rate in Scottish women is 19 percent higher than in English women (26 percent compared to 21.9 percent). The prevalence rate of obesity is 30 percent higher among girls in England (18.1 percent) than those in Scotland (13.8 percent).

Recent projections of obesity prevalence in the UK which were extrapolated predominantly from data from England indicate that by 2050, prevalence would more than double to 60 percent for males and 50 percent for females if current trends persist. The proportion of men having a healthy weight would decline from the current level of 30 percent to 10 percent and the proportion of women would decline to 15 percent from the current 40 percent (Government Office for Science, 2007).

Within some of the devolved regions, there are critical issues relating to the availability of reliable and accurate data on the prevalence rates of obesity. Better surveillance data are needed particularly in Northern Ireland and Wales. Policymakers should urgently review the case for a Northern Irish Health Survey and a Welsh Health Survey, similar to the surveys undertaken in Scotland and England.

However even in England, problems exist with collecting more robust data. For example, within the last year Primary Care Trusts (which are responsible for handling more than 80 percent of NHS contact with patients) failed to record data on BMI for patients as had been planned (Healthcare Commission, 2007).

In the National Child Measurement programme in which non-compulsory height and weight measures for 4-5 and 10-11 year olds are taken, there is evidence to suggest that higher rates of opting out occur among the heavier children, and this is likely to result in the survey systematically underestimating the prevalence of overweight and obesity (ERPHO, 2007). Clearly such issues need to be addressed and the guidance for Primary Care Trusts has now eliminated the word 'obesity' from the document, potentially making parents more willing to have measurements of their children taken.

The availability of accurate information on population levels of obesity is critical in any efforts undertaken by governments to address the problem. Such information is highly relevant as it provides baseline data so that policy makers and public health professionals have a true understanding of the extent of the problem. The availability of accurate and comparable data can be used to make cross country comparisons as has been attempted here. Perhaps most importantly, by having good surveillance mechanisms in place, over the long-term the impact (or lack thereof) of policies can be tracked.

Part 3: A review and comparative analysis of obesity-related policies in the UK

3.1. Methods

This section is informed by two phases of research. The first comprised a literature review to identify obesity-related policy documents for the UK devolved regions. An internet-based search initially sought to identify stand-alone policy documents on obesity from the Department of Health, or related government health agencies in the regions. Subsequently, public health policy documents as well as nutrition and physical activity strategy documents were identified and downloaded from relevant websites. A list of documents reviewed is in Appendix 2.

The second phase of the research involved conducting 15 semi-structured interviews with stakeholders (academics, public health specialists, policy makers, advocates from voluntary/trade organizations) in the devolved regions². These interviews were conducted in order to gather views of the stakeholders on obesity-related policies in their respective countries.

3.2. Background

Devolution in the UK began in 1998, with the creation of an elected parliament in Scotland. This was quickly followed by elected assemblies in Wales and Northern Ireland. Among the various devolved powers, responsibilities for formulating and enacting public health policies were transferred to the devolved regions. As a result, differences in health policy direction among the four regions, which were negligible up until this time, are increasingly significant (Smith and Babbington, 2006). Such differences are exemplified by the decision of the Scottish Government to introduce 'free' personal care for the elderly, in contrast to the other regions (Woods, 2004).

With regards to obesity-related policies, the additional governance structures in place for devolution present challenges for the formulation and implementation of policies in the UK. However, devolution also provides opportunities for the different regions to take different paths and focus on what they consider to be priorities. The separate approaches taken can provide opportunities for comparative learning and sharing of best-practice.

This section reviews and analyzes policies related to obesity in the devolved regions of the UK using findings from policy documents, as well as the insights of stakeholders interviewed for the research. Differences and similarities are identified in the various approaches being used to address obesity within the UK. It should be noted that some interventions reviewed took place under the domain of the UK government. Furthermore, the review is limited to specific interventions and does not encompass all the actions that are being taken by the devolved regions to tackle obesity.

3.3. Obesity on the Policy Agenda

Prior to devolution, obesity was already on the policy agenda in the UK. In the 1992 white paper, *Health of the Nation*, targets were set to reduce obesity prevalence rates in England for men from 7 percent in 1986-1987 to 6 percent by 2005 and for women for the same period from 12 percent to 8 percent (Department of Health, 1992).

² The anonymity of the interviewees was guaranteed as some of the questions posed were of a sensitive nature and the interviews sought to obtain both personal and professional opinions of stakeholders

In 2001, the National Audit Office published a report, *Tackling Obesity in England*, which estimated obesity costs to the NHS and indirect costs to the wider economy (National Audit Office, 2001).

In 2000, the House of Commons Health Committee published a three volume report on obesity which laid out the causes, consequences and recommendations for action (House of Commons, 2004). Most recently, the UK Government report, *Tackling Obesity: Future Choices* outlined the complexity of obesity and the core principles needed for government to tackle obesity more effectively (Government Office for Science, 2007).

3.4. Obesity Strategies

At present, of all the devolved regions, only England has a population-wide obesity specific strategy document to target obesity at the national level. While the other regions do not have population-wide strategies, obesity is recognized as a priority in some public health policy documents. Additionally, interventions to address obesity have been incorporated in diet and nutrition and/or physical activity policy or strategy documents.

In January 2008 the English government published *Healthy Weight, Healthy Lives: A Cross Government Strategy for England* (Department of Health, 2008). The strategy focuses on five main policy objectives – to promote children’s health; to promote healthy food; to build physical activity into individuals’ lives; to support health at work and provide incentives to promote health; and to provide effective treatment and support when individuals become overweight or obese.

Prior to the launch of this strategy, one of the main priorities outlined in the English public health policy document, *Choosing Health: Making Healthy Choices Easier* (Department of Health, 2004a) was reducing obesity. Furthermore, although a national strategy has now been launched, Primary Care Trusts in England already had obesity strategies in place. Thus, until very recently, there had been a ‘bottom-up’ approach to strategic direction on obesity policy.

In Northern Ireland the public health policy document *Investing for Health* (DHSSPS, 2002) has as one of its seven objectives, to ‘enable people to make healthier choices’. Within this objective, addressing obesity is outlined as a specific target.

Obesity in Scotland is recognised as a problem in the policy document, *Improving Health in Scotland: the Challenge* (Scottish Executive, 2003a).

Similar to Northern Ireland and Scotland, Wales does not have a specific policy document targeting obesity. There are, however, policy documents addressing physical activity as well as diet and nutrition and a joint diet and physical activity strategy for children and young people (Welsh Assembly Government, 2006).

Discussion

In some of the devolved regions such as Wales, the lack of an obesity strategy has been the result of a decision to specifically *not* have an ‘obesity strategy’, but rather, to have nutrition and physical activity strategies which would then incorporate obesity. The potential of unintended consequences has been cited as the principal reason for this approach. For example, those working in nutrition might have to divert resources to tackling obesity, and issues such as malnutrition could be marginalized.

While similar views to those in Wales were echoed by some stakeholders from Scotland, others were of the opinion that if an obesity strategy were in place, there would be more concerted efforts to address obesity instead of the ‘piece-meal’ and ‘disjointed’ approach that

is viewed to be currently in place. Indeed, it was expressed that there is pressure being felt in some quarters to have an obesity strategy in place in Scotland.

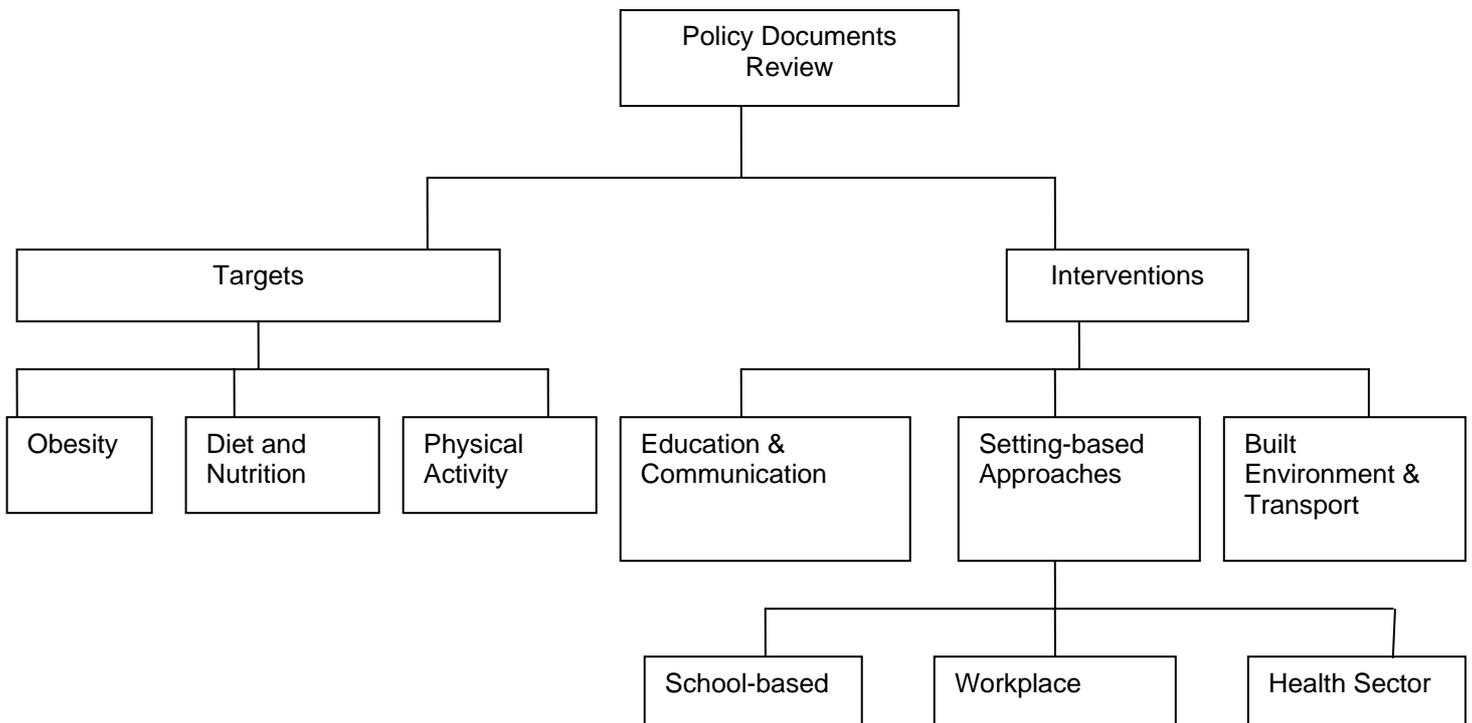
While England is the only devolved region to have an obesity strategy, it has only been launched in the past few weeks and therefore no useful comparison with the other devolved regions can be made at present about the effect, if any, of having an obesity strategy.

It should be noted however, that even in regions where there are no population-wide obesity strategy documents, most stakeholders interviewed felt that obesity was very much high on the policy agenda. This was attributed primarily to two key issues: the rapid rise in childhood obesity and type II diabetes (and the economic costs associated with it), as well as the extensive coverage of obesity in the popular media. The Wanless report, *Securing our Future Health: Taking a Long-term View (2002)* which argued that a sustainable National Health Service required population engagement in health promoting behaviours was also cited as a reason why obesity is high on the policy agenda.

3.5. A Framework for Analysis

The framework for analysis of policy documents used in this review distinguishes two underlying approaches used in policy to address obesity: *targets* and *interventions*. While some of the devolved regions have set targets to reduce obesity, improve diet and nutrition and increase physical activity, others have not.

The second part of the review looks at specific *interventions* aimed at obesity that have been identified. The approach is schematically represented below:



Targets

The use of targets in public policy can be a contentious issue. However, target setting, particularly in England, has been one of the key features of health policy in recent years.

Health targets can 'express a commitment to achieve specified outputs in a defined time period, and enable monitoring of progress towards the achievement of broader goals and objectives' (Wismar *et al*, 2006). Indeed there is evidence that in England the setting of targets led to marked improvements in some spheres that have been targeted such as reduced waiting times (Hauck and Street, 2004). However, there is also evidence that targets can lead to 'gaming', impact on staff morale, and divert resources disproportionately so that targets can be met. Such 'side-effects' to the use of targets, and other performance indicators, have long been observed in academic literature on the topic (Hood, 2006).

3.5.1. Obesity Targets

A key difference between the devolved regions in addressing obesity is in the setting of obesity-related targets. While England and Northern Ireland have set direct obesity-related targets, Wales and Scotland have not. The lack of targets in Scotland has been lamented and calls have been made to set a target for reducing childhood obesity (BBC, 2004).

England and Northern Ireland

In 2004, through a Public Service Agreement (a document outlining targets and responsibilities for actions between government departments or between government and local authority services) the English government set a target 'to halt the year-on-year increase in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole' (HM-Treasury, 2004). This target was to be principally delivered by the Department of Health together with the Department for Culture, Media and Sport (DCMS) and what is now the Department for Children, Schools and Families.

However, in October 2007, the government abandoned this target and has now set a new target to reduce the prevalence rate of childhood obesity and overweight to levels in 2000 by 2020 (HM-Treasury, 2007). It should be noted that concerns had been raised that setting the initial target for 2010 was overly ambitious and consequently there was a risk that if the target was not met within the short time frame, efforts to prevent childhood obesity would be prematurely abandoned. Indeed, investigations into the progress towards this target had revealed that it was unlikely to be met and the prevalence of childhood obesity was continuing to increase (Cole, 2006).

Equally, setting a new target to be met in 2020 has been criticised and the government has been accused of 'moving goal posts' while it tries to get 'its act together' (British Heart Foundation, 2007a). A stakeholder interviewed expressed the view that this could again be seen as a form of 'inertia' which has characterized government approach to tackling obesity to date. There is concern that setting the target to halt the increase in childhood obesity by 2020 will mean the government will not act as aggressively as it would have needed to had it strived to meet the original target date.

Interestingly, with the launch of the obesity strategy, the English government has set itself a 'new ambition' of being 'the first major country to reverse the rising tide of obesity and overweight in the population by ensuring that all individuals are able to maintain a healthy weight'.

In Northern Ireland, the government set a similar target to that in England: to stop the rise in levels of obesity in children by 2010 through a Public Service Agreement. Similarly, this target is shared between the Departments of Education, Department of Culture Arts and Leisure and the Department of Health, Social Services and Public Safety (DHSSPS, 2005). Furthermore,

the Regional Strategy for Health and Wellbeing builds on this PSA target on obesity by establishing an aim to reduce obesity levels in children by 50 percent by 2025 (DHSSPS, 2004).

Unlike England, Northern Ireland additionally set a target in 2002 to halt the increase in the prevalence of obesity in adults by 2010 (Health Promotion Agency, 2002). While England has a new childhood obesity target, it is unclear at present if Northern Ireland has taken a similar approach.

Scotland and Wales

Neither Scotland nor Wales has set of specific targets to either stop the rise or to reverse the trend for population-wide or childhood obesity. In Wales the reason targets have not been set is that stakeholders expressed a lack of adequate baseline surveillance data on which targets could be based and progress then monitored. In Scotland, a stakeholder commented on the fact that a reason why Scotland may not have a target is that targets have been set previously and have not been met as documented in a recent 10 year review of the Scottish Diet and Action Plan (Health Scotland, 2006) and there may now be a reluctance to set targets.

Discussion

The setting of targets in England and Northern Ireland, unlike the other UK regions, offers an interesting example of how devolution is generating divergence in obesity-related policy. These differences (at least in the case of Wales) appear to reflect differences in strategy and the recognition of the unavailability of reliable surveillance data on which progress against targets can be measured.

Lacking any evidence on whether the use of targets in these UK regions is effective or is resulting in gaming and other side-effects, it is not possible at this juncture to evaluate which UK regions have adopted the better approach. From a political perspective, targets enable Governments to demonstrate an agenda and action without actually having to achieve anything. Targets may therefore represent regional variations in political perceptions of public concern about obesity.

Opinions of stakeholders from the devolved regions regarding the setting of targets were mixed. While some felt that targets can indeed prioritize obesity and this could ensure concerted efforts to address it are taken, the predominant view, however, was that there needed to be significantly more 'clarification' about targets than there was at present. For example, for whom are these obesity targets really meant?

If targets are intended to be met by Primary Care Trusts (PCT), is it fair and reasonable to expect PCTs to meet the targets given what is known about the complexity of obesity and how the causes and drivers (and therefore the solutions) are principally outside the boundaries of the health care system? What does one do about the fact that those with the best surveillance systems for obesity can be penalized for not 'meeting targets' while those with inadequate surveillance mechanisms could be seen as 'meeting targets'?

Other stakeholders were concerned about the risk that setting obesity targets can lead to gaming, distortion of behaviour and a narrowed focus. It was expressed that having obesity targets may be to the detriment of other public health priorities. This particular concern was shared by most stakeholders interviewed from Wales and Scotland. As one interviewee expressed: 'There is no point in setting targets for the sake of it. Setting targets could only be helpful if followed up by action to meet those targets'.

3.5.2. Diet and Nutrition and Physical Activity Targets

Two factors that have led to increases in population overweight and obesity have been the shift in diets towards the consumption of energy-dense foods that are high in fat and sugars but low in vitamins, minerals and micronutrients, and trends towards decreased physical activity due to the sedentary nature of many forms of work, changing modes of transportation (from walking and cycling to driving) and increased urbanization (WHO, 2006).

Indeed, in the UK, the majority of individuals do not eat enough of the recommended daily allowance of fruits and vegetables and generally have diets too high in salt, fat and sugar (Department for Environment, Food and Rural Affairs, 2006). Additionally, most individuals do not undertake the recommended levels of physical activity which decrease rapidly as age increases in both sexes but particularly for women (European Commission, 2006a). The setting and achieving of diet and nutrition as well as physical activity targets for the population could assist government in tackling obesity among achieving other health goals.

Diet and Nutrition Targets

All the devolved regions have plans which aim to improve population diet and nutrition by decreasing the intake of non-milk extrinsic sugars and salt and increasing the consumption of fruit and vegetables (to at least 5 portions a day). Furthermore, in Scotland, specific mention is made to increase the intake of complex carbohydrates and oil rich fish (*Scottish Diet and Action Plan, 1996*).

All devolved regions have set various diet and nutrition targets. England's target is to reduce the average intake of salt by 2010 (Department of Health, 2005a). While salt intake in the UK is declining, it remains 50 percent greater than the recommended daily maximum (National Centre for Social Research, 2006).

Northern Ireland set targets which were to be met by 2002 (Health Promotion Agency, 1996). However, no baseline data were available to track progress and there is no evidence that an evaluation has been undertaken to determine if targets were met.

Importantly, Wales has set not only food intake targets, but also seeks to measure changes in knowledge and attitudes regarding food and nutrition (FSA Wales, 2003). Wales currently is in the process of developing a Quality of Food Strategy. The priority issues addressed in the document extend beyond the health arena and include issues such as fair trade, economic viability and accessibility and affordability (Wales Assembly Government, 2007).

While all the devolved regions have diet and nutrition plans, the *Scottish Diet Action Plan (SDAP)* is widely considered to be one of the most comprehensive and has been in existence since 1996. Scotland has poorer health outcomes compared to England, and the *SDAP* set to address the nutritional needs of the population with the ultimate goal of improving population health.

In the *SDAP*, recommendations were made to supply healthier food through changes in the supply chain such as increasing consumer demand for healthy food, giving people a better understanding of healthy eating through training, improving food labelling and influencing those who govern and monitor changes in health. Although there have been improvements in some areas (such as increased breastfeeding rates and greater health education resources and communication campaigns), most targets set in 1996 were not met (Health Scotland, 2006). Although the targets have now been revised with the objective that they will be met by 2010, there is still scepticism that this will happen (Health Scotland, 2006).

Data from recent surveys in England and Wales suggest that while fruit and vegetable intake is still below recommended minimum levels, there have been increases in consumption over the last few years. There were increases in fruit and vegetable consumption in Wales between 2003/4 and 2005/2006 (Welsh Health Survey, 2006). In England, between 2001 and 2005 there was an improvement in both the daily consumption and the proportion of

individuals consuming five or more portions of fruit and vegetables per day, although at 28 percent of adults and 17 percent of children, these proportions are still extremely low (Office of National Statistics, 2006).

Physical Activity Targets

It is recommended that adults should participate in at least 30 minutes of moderate physical activity 5 days a week while children and young people (those aged 5-18) should participate in at least one hour a day of moderate physical activity (Department of Health, 2004b).

All regions have set targets to increase physical activity with England setting the most ambitious target of having 70 percent of adults meet the recommended levels of activity by 2020 and Scotland, 50 percent of Scottish adults by 2022 (Department for Culture Media and Sport, 2002; Department of Health, 2005; Scottish Executive, 2003).

Northern Ireland set targets in 1996 which were to be met by 2002 to increase the proportion of men and women who achieve recommended levels of activity to 35 percent of men and 25 percent of women (Northern Ireland, 1998). There is no evidence that an evaluation has been undertaken to determine whether these targets have been met.

Wales set the target in 2002 to increase the proportion of adults who undertake the minimum recommended levels of physical activity by one percentage point per annum for the next twenty years (The Welsh Assembly Government, 2004). A number of targets have also been set for children in England, Scotland and Wales.

While the proportions of individuals meeting recommended levels of physical activity is still low, there is evidence from Scotland (Scottish Public Health Observatory, 2007) and England (Office of National Statistics, 2006) that proportions are increasing. For example in Scotland, the proportions of men and women aged 16-74 meeting minimum recommended levels of physical activity increased from 41 percent in 1998 to 44 percent in 2003 in men and from 30 percent in 1998 to 33 percent in 2003 in women (Scottish Public Health Observatory, 2007).

In England progress towards physical activity targets for children has been significant. A children's physical activity target was set to increase the proportion of school children spending at least two hours a week on high-quality sport from 25 per cent in 2002 to 75 per cent in 2006, and 85 per cent in 2008. A recent Sport Survey 2005/6 found that 80 per cent of pupils in partnership schools (accounting for 80 percent of schools in England) participate in at least two hours of high quality physical education and school sport in a typical week (TNS, 2006). This meant the public service agreement target was not only met, it was surpassed.

Discussion

Evidence from health surveys from some of the devolved regions suggests a positive trend of an increasing proportion of individuals consuming the minimum recommended levels of fruit and vegetables. There is also an increase in the proportion of individuals meeting the minimum recommended levels of physical activity. However, whether these trends are an indication that population targets set are likely to be met remains unclear.

With regards to diet and nutrition, the recent review of the *SDAP* offers valuable insights into why there were failures to meet the targets that had been set. Four possible reasons have been posited: failure of policy, failure of implementation, consumer resistance to dietary change and inadequate data to monitor the targets that had been set (Health Scotland, 2006).

First, one of the key failures of policy was attributed to the unwillingness of policy makers to regulate and legislate as necessary on the food supply chain and therefore impact on the demand for healthy food by consumers. Instead, the most effective actions of the *SDAP* have been those taken by the public and voluntary sectors relating to issues such as health education and the support of community action.

Second, the review found that while there was no shortage of implementation effort, leadership and accountability at the regional level was missing and implementation efforts and resources were spread too thinly over a wide range of small-scale, short-term projects and initiatives. The many small successful projects lacked 'national reach'.

Third, dietary change is a slow process and there was an underestimation of how much resistance there would be to dietary change by consumers without the provision of supportive environments that would enable them to do so.

Fourth, in addition to having adequate data to monitor targets that have been set, the review concluded that it is also important to monitor other food-related indicators that shape consumption patterns such as available food items at the retail level.

While all regions have set diet and nutrition targets, if there is to be any hope that they will be met, policy tools such as regulation (for example of salt content in food) may need to be used and effective implementation strategies will need to be in place. Consumers need support from government in order to 'choose' healthier behaviours and it is crucial that adequate monitoring mechanisms are in place.

In England, the PSA target for physical activity for children in school has been exceeded, demonstrating that when realistic targets are set and backed up with action to meet them, targets can indeed be met. While the proportion of adults engaging in physical activity has been increasing, there needs to be a more sustained effort if the ambitious targets are to be met.

Interventions

3.6. Analysis of strategies and interventions to address obesity

A number of frameworks have been used to review and analyze obesity-related policies (for example Swinburn *et al*, 1999; Crombie *et al*, 2005; WHO, 2007). In this report, the focus of the review and analysis is on the following:

- Population Education and Communication Strategies
- Settings-based Approaches (school-based interventions, workplace interventions and health sector)
- The Built Environment and Transport

3.6.1. Population Education and Communication Strategies

A key role for governments that has been identified by WHO in the Global Strategy on Diet, Physical Activity and Health (2004) is that they provide 'accurate and balanced information' to the general population regarding diet and nutrition as well as physical activity. This can range from raising awareness through mass media campaigns, improving adult literacy and cooking competency skills to regulating the marketing and advertising of food-related information and regulating information on product labels.

3.6.1.1. Raising Awareness and Mass Media Campaigns

While it is well known that provision of information alone cannot induce behaviour change, individuals clearly need information on how to modify their behaviour and what comprises desirable behaviour if they are to be expected to engage in behaviour change. For this reason, mass media campaigns have primarily been aimed at raising awareness, providing

knowledge and changing attitudes, with the aim of contributing to potential behaviour change (Noar, 2006).

A review of the policy documents reveals that all devolved regions recognize the need for information/messages disseminated to the public about health to be coordinated and consistent. Across the UK, mass media campaigns have been launched to raise awareness about the need to increase fruit and vegetable consumption under the (at least) 5-A-Day campaign. In England, a one year follow up of pilot projects indicated the campaign had stemmed a fall in fruit and vegetable intake against the national trend (Department of Health, 2003). Mass media campaigns have also been launched to raise awareness about the need to reduce salt intake.

With regards to communicating information to the public about overweight and obesity, evidence suggests that there remains scope to achieve more. For example, distorted perceptions of what qualifies as normal and excess body weight, particularly in relation to the parents of overweight and obese children, have been found to be a significant issue. In one study in England, only 1.9 percent and 17.1 percent of parents of overweight and obese children respectively, identified their children as such (Carnell, 2005). In a further study, only a quarter of parents of overweight children identified their children as overweight (Jeffrey *et al*, 2005).

If individuals fail to recognize overweight or obesity in themselves and others, any information programs linking overweight and obesity with health problems clearly risks failing to induce any diet and lifestyle changes. Thus, it is essential that greater awareness is achieved about the need for individuals to accurately assess their weight.

Evidence from other public health programs such as tobacco control has shown that successful campaigns that use a 'social marketing approach' can be effective in providing knowledge and changing attitudes. Social marketing uses concepts from commercial marketing to design and implement programs aimed at bringing about behaviour change that would benefit society. According to Stead *et al*, 2007:

'Social marketing has great potential in the fight against obesity. It has a proven track record in changing both dietary and exercise behaviour; it can inform the debate on how the obesogenic commercial environment should be addressed; and it can bring new ideas to the inequalities debate.'

Scotland has deployed a social marketing approach in the development of its *HealthyLiving* brand, which is used to communicate information and messages about healthy eating and physical activities. This includes TV and radio advertising, programming, written material, a health advice and information telephone service and website.

The English government pledges to invest in an integrated marketing programme to 'inform, support and empower' parents to make changes in particular to their children's diets and levels of physical activity (Department of Health, 2008). This would include universal messages for all families as well as tailored messages for at risk families.

In Wales, while there is no obesity specific social marketing campaign, there is a generic population-wide healthy lifestyle campaign, *Health Challenge Wales*. This has its own branding, website, TV advertising, resources and policy links. Northern Ireland so far does not appear to have used social marketing strategies.

3.6.1.2. Improving Cooking Skills and Adult Health Literacy

Within the devolved regions, there are community programs in place designed to improve cooking skills. *Cook It!* is a nutrition education initiative developed in Northern Ireland which helps low income families in particular, to acquire the skills to benefit from healthy eating. Similarly, Wales has a *Cooking Bus* and Scotland has *Cooking for Health*. These programs are especially aimed at low-income groups.

Improving the health literacy skills of individuals as well as improving cooking skills can lead to the consumption of healthier diets. In England for example, there is a national programme, *Skilled for Health*, which is designed to improve adult health literacy.

3.6.1.3. Marketing, advertising, sponsorship and promotion of food

Food advertising has a particularly significant effect on children: their preferences, purchasing behaviours and consumption patterns. This effect has been found to be independent of other factors and to operate both at a brand and category level (Hastings *et al*, 2003).

In general, high energy but nutritionally deficient foods (junk food) account for a disproportionately large percentage of all food advertising, whilst advertising for healthier options is significantly lower. This disproportionate advertising encourages and reinforces the consumption of unhealthy diets by children. Furthermore, it undermines the efforts to encourage healthy eating. Therefore, making it mandatory for food and beverage industries to responsibly market their products (especially to children) should be an integral part of food policy by government.

While all of the devolved regions independently recognize that marketing, advertising and promotion of junk food particularly towards children should be regulated, the regulation regarding the marketing and advertising of food products is UK-led. The UK regulator, the Office of Communications or Ofcom, has banned advertising of High Fat, Salt or Sugary substances in or around programmes made for children (including pre-school children), or in or around programmes that are likely to be of particular appeal to children aged 4-9 as of April 1, 2007. The age limit has been increased to 4-15 year olds as of 1 January 2008 (Ofcom, 2007).

3.6.1.4. Food Labelling

Governments may require product manufacturers to provide information about a product on its packaging and to regulate the quantity of a product sold in a package. Further regulations to make it easier for consumers to choose healthier food and meal options can be introduced in relation to the two types of information available on food products: nutrition labels and 'health claims'.

Nutrition labels provide consumers with information about the nutritional properties of food. 'Health claims' are those pieces of information provided to the consumer on packaging about health *advantages* of particular foods and nutrients; such 'health claims' also serve as a marketing technique employed by food and beverage companies (Hawkes, 2004). There has been recent EU regulation to limit health claims on foods which, for example, claim to be "low in salt" or "light". Foods with these types of claims will have to meet standardised definitions agreed by the EU (European Commission, 2006b). Furthermore, foods making such claims will be mandated to make it clear on the same label if they are also high in fat or sugar (European Commission, 2007).

In their individual diet and nutrition policy documents, the four devolved regions of the UK have called for labelling of foods to assist consumers in making healthier food choices. However, this form of regulation takes place at a UK-wide level. The UK Food Standards Agency has recommended that a 'traffic light' front of labelling system be adopted by food manufacturers. The traffic light colours indicate if food has high (red), medium (amber) or low (green) amounts of fat, saturated fat, sugars and salt per 100g of the food. While some manufacturers have adopted this, others have chosen an alternative based on the percentage in each food of an individual's Guideline Daily Amount (GDA) of a nutrient. This, however, is not based on daily recommended allowance of nutrients.

Discussion

There is a need to communicate and disseminate information to the general public about the impact of overweight and obesity throughout the devolved regions. Discussions with stakeholders revealed that while there has been extensive media coverage of obesity and most individuals were aware of obesity, there was a need for government to have social marketing based campaigns in place. Such campaigns were felt to be necessary in order to have the public actively engaged in issues relating to obesity. At present there is a sense that the public is not at all engaged and public support and acceptance of future policies introduced by government to address obesity will be required.

Social marketing-based public health campaigns in which multiple themes about obesity are targeted to specific demographic groups to raise awareness and improve knowledge may fill this gap. Mass media campaigns, however, are costly and some feel there has been underinvestment by government. Furthermore, there is a need to recognize that returns on social marketing cannot be expected in the short term. Social marketing is a long term investment whose funding needs should be measured in 'decades and not years' (Stead *et al*, 2007).

Food and drink companies spend significant resources marketing, advertising and promoting their products as well as on sponsorships. For example, globally in 2004 Coca Cola and PepsiCo spent a combined \$3.9 billion and McDonald's spent \$720 million on these activities (Lang *et al*, 2006). In contrast, public health campaigns have chronically been under-funded. In its obesity strategy, the English government has outlined that it will invest £75 million over a three year period on an 'integrated' marketing programme.

To increase revenues available for public health campaigns, the UK should consider imposing a tax similar to that pioneered by the French parliament, which levies a 1.5 percent tax on advertising revenue from soft-drinks companies. This tax aims to raise revenue that can be used to fund health promotion activities. Alternatively, companies can avoid paying this tax if the products they carry or promote have a specific positive health message.

The ban on junk food advertising by Ofcom described above which focuses on programming for children, has been criticized as being not stringent enough as many children watch programming such as soap operas that is not specifically for children, which will continue to advertise high fat salt or sugary substances. Furthermore, a call had been made by public health advocates to have a total ban on junk food advertising on television before 9pm (British Heart Foundation, 2007a). For maximum effect, comprehensive bans which include other forms of media should be enacted and some have called for these to be for the entire population and not just for children

An alternative to the outright banning of the advertising of junk food would be to reduce the 'supply' of advertising. Government could, for example, impose limits on the amount of advertising space and time that may be used to promote junk food on TV, radio and in print media, in order that media companies can then sell-off this limited 'air-time' or print space to only those companies willing and able to pay premium fees.

With regards to food labelling, the existence of two systems (the Traffic Light System and the GDA system described above) has led to a lack of consistency in the provision of information to consumers. This is counter to the stated objectives of devolved regions to provide information in a simple form and in a manner that is consistent. Reviews to evaluate the impact of the two systems on consumer purchasing behaviour, among other things, are currently underway (FSA, 2007). The English government has stated that it expects industry to adopt a single labelling system based on the recommendations stemming from the review and has not ruled out possibly using legislation (Department of Health, 2008).

The English government has also indicated that it will work with the food and drink industry and other relevant stakeholders on a Healthy Food Code of Practice. Further, as food is being increasingly consumed outside the home, the Code will incorporate the food catering industry and work on such issues as consumer information (Department of Health, 2008).

The issues related to food labelling and banning advertising against junk food discussed above clearly reflect the dilemma confronting the government in relation to obesity and business promotion. On the one hand, government seeks to promote public health and on the other, to have a food industry which creates jobs and contributes to the economy.

Some stakeholders believe a key reason government has failed to introduce more draconian policies that could be more effective in combating obesity is that government is reluctant to 'upset' some interest groups such as the food industry. There is a sense that government has worked too closely with the food industry to the detriment of taking public health decisions that would be unpopular with the industry. However, as one stakeholder put it: 'While government has to balance job creation with public health goals, it needs to promote companies that produce food that is good for the public and which promote public health goals.'

3.6.2. Settings-based Approaches

The communities in which individuals learn, work and live have a significant impact on their health and health-related behaviours. Accordingly, interventions and programs in schools, workplaces and other community-based settings are critical in a comprehensive strategy to combat obesity. Several such 'settings' have led the way in efforts to access individuals via their immediate environments.

3.6.2.1. School-based interventions

The school environment provides a 'captive audience' of students and a forum for communicating with a large proportion of young people. Education and information on healthy eating can be provided alongside the main school curriculum. In schools, young people can be taught about nutrition, receive lessons in cooking nutritious meals and receive healthy meals, and develop interest in sport.

Tackling obesity in the devolved regions has principally focused on childhood obesity and, indeed in England, the stated strategic objective is to focus initially on childhood obesity (Department of Health, 2008). Within this population, significant efforts have been made in school communities to promote healthy eating environments and physical activity.

- *Healthy School Schemes*

Common to all devolved regions are *Healthy School Schemes*: the Welsh Network of Healthy School Schemes, Health Promoting Schools in Scotland, Healthy Schools Program in England and Health Promoting Schools in Northern Ireland. The principle objectives of the schemes are to provide healthy environments for students which go beyond diet and physical activity, but also include mental health issues for example.

- *School Meals*

There have been significant efforts to improve the nutritional quality and standards of school meals. This began with an initiative in Scotland (Scottish Government, 2003), which was subsequently followed by action in the other regions. In England, efforts to improve school meals were given strong political momentum by the intervention of celebrity chef Jamie Oliver in exposing the poor quality of school meals. However, recent reviews of healthier school meal projects in England have revealed student uptake has been low (BBC, 2007b). This has been attributed to lack of effective marketing of the healthier school meals and inadequate parental involvement.

The English government has indicated that schools will be expected to develop 'healthy lunchbox policies' in order to ensure that those who do not eat school lunches consume

healthy food (Department of Health, 2008). However, a key question emerges as to how such policies will be enforced.

The approach to the improvement of the school meals program in Wales has been much more cautious in comparison to England. Pilots have been put in place and efforts are being made to engage with students, staff and families in the provision of healthy school meals. The approach Wales has taken is to learn from the successes and failures of the school meals program in England (personal communication).

- *Limiting Access to 'Junk Food'*

In addition to providing nutritious school meals, there have been efforts to remove junk food in schools particularly in vending machines. Legislation was passed in 2007 banning junk food from Scotland's schools (BBC, 2007a). The law also provides nutritional standards for all food and drink served in schools and allows councils to provide free milk and healthy snacks. Northern Ireland and Wales have also enacted bans in schools following legislation by England banning junk food in schools. In England there is also a 'free fruit in schools' scheme and Wales has a 'free healthy breakfasts' scheme.

- *Physical Education*

Increasing levels of physical education in schools has been highlighted in policy documents from all devolved regions and there has been a focus on imposing minimum hours of physical activity per week in schools. A number of initiatives are in place to encourage more walking to school instead of travelling by car or by bus. England, for example, has a Travelling to School action plan which outlines a series of measures for national and local government for schools to promote more walking, cycling and bus use on the journey to and from school (Department for Transport, 2003).

- *Measuring Height and Weight*

In addition to the nutrition and physical activity programs in schools, in England there is a program to measure the height and weights of students in school. While this initiative was initially unsuccessful, there has recently been increased uptake (personal communication). This has been attributed to increasing parental involvement and not making obesity the focus of the program but focusing on general health, i.e., it was important to communicate that the program was also about children who are of 'normal' weight as well as those who were underweight and overweight.

Wales is presently in the process of consulting on measuring the heights and weights of children with a view to establishing a national programme, which seeks to draw lessons from the English programme.

3.6.2.2. Workplaces

The workplace has been established as one of the priority settings for health promotion in the 21st century (WHO, 2007). It is increasingly being recognized that the workplace has a direct influence on the physical, mental, economic and social well-being of workers. Beyond the provision of basic occupational health and safety programmes, workplaces are an ideal setting to support the general health and wellbeing of employees.

The negative consequences of obesity should be of concern to employers. They can have negative consequences for organizations. For example, a recent study in the United States found that obese workers filed twice the number of workers' compensation claims, had seven times higher medical costs from those claims, and had thirteen times more lost work days due to work injury/illness than non-obese employees (Ostbye, 2007).

Employers can provide support for their employees to maintain healthy lifestyles in a variety of ways, for example, by providing healthy meal options in cafeterias and by making available shower facilities for those who may cycle to work. They can also have organizational policies which encourage healthy lifestyles such as providing gym memberships to employees.

3.6.2.3. The Health Sector

The health sector plays a role in both the prevention and treatment of obesity. Health care professionals, especially physicians, are a primary source of information about healthy behaviours for many individuals but particularly those in lower socio-economic groups. However, existing primary care systems are not well suited for health promotion and prevention partly because of the comparatively brief consultation times. In addition, many professionals lack the motivation and skills to encourage health-promoting behaviours (Wilson 2006).

Professional advice and counselling to overweight and obese patients on living healthier lifestyles, drug therapy and surgery can all make important contributions in tackling obesity.

Scotland was a trailblazer when it first proposed an integrated approach to the treatment and prevention of obesity in 1996 (SIGN, 1996). The idea of integrating these two aspects of management was necessary as both clinical and public health had failed to engage on obesity (Lean *et al*, 2007). Scotland has also taken a prominent lead in developing an evidence-based programme for weight management within routine NHS primary care through the Counterweight Programme (www.counterweight.org).

In England, partnerships between Primary Care Trusts and commercial weight loss programmes such as Weight Watchers are beginning to emerge. The National Institute for Health and Clinical Excellence has prepared a definitive guidance on the prevention, identification, management and treatment of obesity (NICE, 2006). This guidance is not only tailored to the NHS, but covers other settings such as schools, workplaces and communities in recognition that solutions to tackling obesity also lie outside the 'healthcare system'.

Discussion

In all the devolved regions, obesity-related policies have focused on preventing childhood obesity. In fact, the English obesity strategy is to initially focus on preventing childhood obesity.

A number of reasons for this have been posited by interviewees and others. First, with the increase in childhood obesity, there has been an alarming rise in type II diabetes in children and this has served as an impetus for action.

Second, by focusing on prevention particularly of childhood obesity, there is the expectation that obesity in adulthood would be averted. Evidence suggests that individuals who are obese in childhood are more likely to be obese as adults than those who are not. It is argued that focusing on prevention would be cost-effective as currently most of the costs associated with obesity are not seen until adulthood.

Third, because of the lack of effective and cost-effective prevention interventions for weight gain in later life, others have suggested that focusing on childhood obesity has been a tactic used to 'duck' the main problem of dealing with the large proportion of the adult population that is obese (Lean *et al*, 2007).

Fourth, it has also been suggested that it is much easier to garner public support for some interventions that must be taken (such as banning advertising of junk food) if they apply to children and not to the entire population.

Finally, most policies related to prevention of childhood obesity have focused on the school environment. The school-setting is hugely important to policy on obesity, providing a controlled environment in which to implement most anti-obesity policies; education and awareness raising, cooking skills, limiting access to unhealthy foods and increasing physical activity levels. It is therefore a much easier setting to target approaches than within the larger community.

However, policy makers must remain cognizant of the fact that children do spend the majority of their time outside the school environment. Most meals, for example, are consumed outside of school. Therefore, it is critical to have a comprehensive set of policies in the broader environment which complement those aimed at providing healthy school environments.

In addition to school programs, there is a plethora of community-based food and nutrition projects within the UK. In Wales, for example, there are efforts to have these 'joined up' with physical activity programmes. However, the sustainability of some of these community projects is undermined because many are volunteer-led and the funding is of a short term nature. Interviewees expressed the need for the devolved regions to secure long-term funding for community-based programs which are found to be effective.

To date, the potential for using workplaces for obesity interventions has not been fully exploited by the devolved administrations. One of the major cornerstones of the English obesity strategy is to 'support health at work'. Government has indicated it will work with employers and employee organizations to develop pilots exploring how companies can best promote wellness among staff and how they can make healthy workplaces part of their core business models (Department of Health, 2008). In the other regions, award schemes have been proposed in policy documents to promote more action in workplaces to address obesity and to highlight good practices.

The focus on the obesity-related policies has been on prevention but failure to implement effective policies has resulted in more than 20 percent of the adult population being obese in the devolved regions. Significantly more investment on treatment for both pharmacotherapy and surgery is needed. At present, three drugs are currently licensed in the UK for the treatment of obesity (Wilding, 2007). In clinical trials, these drugs have been shown to result in greater weight loss than interventions that focus solely on lifestyle changes. More importantly, they have a positive impact on weight loss maintenance, which is notoriously difficult to achieve (Sjostrom *et al*, 1998, James *et al*, 2000 and Pi-Sunyer *et al*, 2006).

In addition to drug therapy, surgery can also be used for the treatment of obesity. Although not without side-effects, bariatric surgery for morbidly obese individuals is particularly effective in the treatment of obesity (Korenkov and Sauerland, 2007).

3.6.3. The Built Environment and Transport

The built environment and transport impact on the energy expenditure side of the obesity equation. During the last 30 years, obesity is believed to have risen significantly partly because of urbanization, technological changes and individuals becoming more sedentary.

Transport and planning policies have created communities which discourage physical activity, thus contributing to obesity and overweight. The layout of towns, cities and buildings (the built environment) influences the ability of individuals to engage in physical activity. Communities which do not address the needs of pedestrians and cyclists, for example, by not providing sidewalks or safe cycle lanes, diminish the opportunities for engaging in these activities.

The National Institute for Health and Clinical Excellence (NICE) has developed a guidance which sets out recommendations based on evidence of effectiveness and cost-effectiveness on how to improve the built environment in order to promote and support physical activity (NICE, 2008).

The English government is investing in 'Healthy Towns' by working with selected towns and cities on improving their infrastructure and using whole-town approaches to promoting physical activity (Department of Health, 2008). Further, there is a recognition of the need to provide environments that are conducive to individuals taking part in physical activity (making places more accessible for walking and cycling) within cities and to also promote and make use of the countryside. There is some evidence to indicate that cycling levels have been increasing in recent years and voluntary organizations such as *Sustrans* have been actively working to promote use of alternative transport (Sustrans, 2007).

Similarly in Scotland, there is an objective to develop and maintain high-quality environments that are long-lasting for the purposes of providing support for inactive people. A public health professional from Scotland alluded to efforts to engage urban planners in order to raise their awareness of the significant impact urban design has on population health.

In Wales there is a goal of extending the sport and physical activity experiences introduced in school outside of school programmes in order to foster continued participation in the community and away from the school environment.

Discussion

The devolved regions have similar strategies in place for improving the built environment such that opportunities for individuals to participate in physical activity are supported. The *Tackling Obesities: Future Choices* report has drawn parallels between obesity and climate change. There are broad areas for overlap policy between the two. For example, policies to reduce 'carbon footprints' such as increasing the walkability and cyclability of communities directly impact on obesity. Thus, efforts to tackling obesity could greatly benefit from actions designed to combat climate change. With a plan to build three million new homes by 2020, England has an opportunity to build communities and homes which promote public health goals of future generations for decades to come.

Part 4: Summary and Recommendations

Over the past two decades or more, prevalence rates of obesity among both children and adults in the UK have increased significantly to such an extent that obesity is now considered to be an 'epidemic'.

Individuals live in what have been termed obesogenic environments; these are environments which encourage excessive food consumption while simultaneously, opportunities for physical activity are decreased. It is increasingly being recognized that if population obesity is to be effectively tackled, public health policies that aim to change these obesogenic environments are urgently needed.

Policy Challenges

Within the UK, the responsibility for formulating and implementing obesity-related policies lies within the devolved regions. The devolved approach creates an added layer of complexity for regions in tackling obesity. For example, the ability of devolved regions to influence product reformulation by UK food companies is quite limited and the devolved regions cannot use fiscal policies in tackling obesity as taxes are levied at the UK level. Despite these challenges, devolution also offers opportunities for regions to take action independently. This for example, enabled Scotland to first introduce improvements for school meals serving as an example for the other regions to follow.

A key difference in the approach to tackling obesity has been in the setting of obesity-related targets. While England and Northern Ireland have done so, Wales and Scotland have not. In England targets have been centrally driven but and until very recently, obesity strategies have been developed at the local level by Primary Care Trusts without strategic direction from the 'top'. While the setting of (or lack thereof) targets may reflect differences in strategy, it is too early to determine if setting targets has had any effect.

Until very recently, none of the UK devolved regions had a national obesity strategy. It is only within the past weeks that the English national strategy was launched. Given the urgency to take action and the complexity of obesity, the lack of national strategies in Northern Ireland, Scotland and Wales is indeed surprising and so is the fact that the English obesity strategy has only been launched very recently. While many of the existing diet and nutrition and physical activity strategies in place address relevant issues that pertain to obesity, the development of national strategies for addressing obesity which integrate these existing strategies and fills any 'gaps' that exist in tackling obesity should be urgently considered.

Monitoring and Evaluation

At present, comparisons of obesity prevalence in the devolved regions are precluded by the lack of availability of comparable data. Better surveillance mechanisms need to be put in place in the devolved regions but particularly in Northern Ireland and Wales. Considerations should be made to have similar mechanisms in place to facilitate comparisons between the regions. Having appropriate surveillance mechanisms in place is crucial as such information provides baseline data and over the long run can be used to assess the impact (or lack thereof) of policies.

In the devolved regions, there is a plethora of on-going diet and nutrition and physical activities programs. Uncovering information on the effectiveness of these programs is a challenge. Devolved regions need to consider having central repositories for obesity-related project evaluation information. In England, this task will presumably be undertaken by the new Obesity Observatory.

A Life Course Approach to Obesity

To date, policy interventions to tackle obesity in the devolved regions have been primarily aimed at preventing childhood obesity. This focus has neglected tackling obesity in adulthood and yet age is a significant risk factor for obesity with most obese individuals being adults who account for the majority of obesity-related financial costs. There is a need for more research and action on effective and cost-effective prevention of weight gain in adult life as well as weight loss maintenance. A comprehensive, life course approach to the prevention and treatment of obesity which will ensure that obesity is tackled across all generations needs to be in place in all regions.

A UK-wide Strategy for Obesity

As discussed earlier, one of the challenges presented by obesity is the existence of multiple layers of governance (global, European, UK-wide, devolved regions and local) on issues that directly impact on obesity. At the global level, the World Health Organization has a Global Strategy on Diet and Nutrition and Physical Activity which is aimed at giving strategic direction to member states in tackling obesity. At the European level, the European Commission has produced a Strategy for Europe on Nutrition, Overweight and Obesity Related Health Issues.

It is proposed here that there is scope for a UK-wide strategic framework for tackling obesity. As described above, the devolved regions do not have the leverage to take action in some areas critical to a comprehensive response to obesity independent of the UK government. For example, while it is most appropriate at the devolved region to address issues relating to health promotion in schools or the built environment, it is only at the UK- level that fiscal policies can be implemented. Similarly, education programmes targeted at the community level are the responsibility of the devolved regions but the restriction of promotion of unhealthy foods is being undertaken at the UK-level. An advantage of having a UK-wide strategic framework for action which complements devolved regional strategies is that such a dual system allows for devolved regions to focus on areas in which they have total influence.

Tobacco control offers an example for developing complementary UK-wide and devolved regional strategic frameworks for action. For example, fiscal policies are under the remit of the UK government; therefore, tobacco-related taxes are levied at the UK-wide level. Similarly, legislation to ban the advertising and promotion of tobacco products is at the UK level. This UK level of action is complemented by efforts that have taken place at the devolved regions such as banning of smoking in public places and education programs in schools.

While one should not under-estimate the challenges of how such a complementary strategic framework would operate, serious consideration should be given to having such a UK-wide strategy in place as this could provide an integrated approach to tackling obesity. There have been actions taken by UK bodies such as the FSA with regard to food labelling and Ofcom with regards to banning junk food advertising. However, similar to the interventions that have been introduced by the devolved regions to tackle obesity, these actions have not been in the context of any strategic framework. Given the seriousness of the obesity epidemic in all the devolved regions of the UK, there would be significant benefits to having a shared framework and vision for tackling it.

Appendix 2: Policy Documents Reviewed

England:

<p><i>Healthy Weight, Healthy Lives: A Cross Government Strategy for England</i> (2008) www.dh.gov.uk</p>	<p>The strategy focuses on five main policy areas – to promote children’s health; to promote healthy food; to build physical activity into individuals’ lives; to support health at work and provide incentives to promote health and to provide effective treatment and support when individuals become overweight or obese.</p>
<p><i>Choosing health: making healthy choices easier</i> (2004) www.dh.gov.uk</p>	<p>‘Choosing health’ is a national strategy for improving health in England, focusing mainly on individual lifestyle changes, supported by proposed fiscal, legislative, environmental, commercial and other changes to encourage, enable and empower the individual.</p>
<p><i>Delivering choosing health: Making healthier choices easier</i> (2005) www.dh.gov.uk</p>	<p>Delivering choosing health sets out the key steps that need to be taken over the three years (2005-2008) to deliver the white paper commitments. Tackling obesity is one of the key priorities.</p>
<p><i>Choosing a better diet plan: a food and health action plan</i> (2005). www.dh.gov.uk</p>	<p>The aim of the action plan is improve health in England by reducing the prevalence of diet-related disease, and to reduce obesity in England by improving the nutritional balance and the average diet.</p>
<p><i>Choosing activity: a physical activity action plan</i> (2005) www.dh.gov.uk</p>	<p>The aim of the plan is to promote activity for all, in accordance with the evidence and recommendations set out in the Chief Medical Officer’s report.</p>
<p><i>At least five a week: evidence on the impact of physical activity and its relationship to health</i> (2004)</p>	<p>This report of the Chief Medical Officer is aimed at those concerned with formulating and implementing policies and programmes that use the promotion of physical activity, sport, exercise and active travel to achieve health gain.</p>
<p><i>Strategy Unit Game Plan: a strategy for delivering government’s sport and physical activity objectives</i> (2002) http://www.isrm.co.uk/reference/documents/gameplanpart1_000.pdf</p>	<p>Game Plan highlighted the benefits of physical activity on health, stating that 30 minutes of moderate activity, five times a week, can help reduce the risk of cardiovascular diseases, some cancers and obesity.</p>
<p><i>DWP, DoH and Health and Safety Executive Health, work and wellbeing- Caring for our future A strategy for the health and well-being of working age people</i> (2005)</p>	<p>This report sets out a strategy to improve the health and wellbeing of the working age population. One action on healthy workplaces is to develop a cross-government campaign on obesity; raising awareness of the steps people can take through diet and physical activity to prevent obesity.</p>
<p><i>Department for Transport Walking and Cycling: An action plan</i> (2004). www.dft.gov.uk</p>	<p>This report looks at ways to encourage people to choose to walk and cycle more often.</p>

Northern Ireland

<p><i>Investing for Health. Available online at:</i> http://www.dhsspsni.gov.uk/show_publications?txtid=10415</p>	<p>The Investing for Health strategy seeks to shift the emphasis by taking action to tackle the factors which adversely affect health and perpetuate health inequalities. It contains a framework for action to improve health and wellbeing and reduce health inequalities which is based on partnership working amongst government departments, public bodies, local communities, voluntary bodies, District Councils and social partners.</p>
<p><i>Fit Futures: Focus on Food, Activity and Young people</i> http://www.dhsspsni.gov.uk/ifh-fitfutures.pdf</p>	<p>Fit Futures: Focus on Food, Activity and Young People, was established under options for tackling the issue of overweight and obesity in children and young people. The focus of Fit Futures is on the prevention of overweight and obesity and on the identification of options to support healthy eating and active living.</p>
<p><i>Eating and Health. A food and nutrition strategy for Northern Ireland</i> http://www.healthpromotionagency.org.uk/Resources/nutrition/pdfs/Nutritionstrategy.pdf</p>	<p>This strategy builds upon the broad nutritional targets identified in the Regional Strategy for the Northern Ireland Health and Personal Social Services (1992-1997), by explaining why the food type of food consumed is important and shows the potential for coordinated action to bring about desired changes. Within the strategy six key players are identified: food producers and processors; food retailers; caterers; nutrition educators, including health professionals; representatives of the education sector; and voluntary and community groups.</p>
<p><i>The Northern Ireland Physical Activity Strategy Action Plan 1998-2002</i> http://www.healthpromotionagency.org.uk/Resources/physicalactivity/pdfs/paactionplan.pdf</p>	<p>This plan provides a framework for the development of public policy and the implementation of activity programmes.</p>

Scotland

<p><i>Eating for Health: A Diet Action Plan for Scotland</i> (1996). http://www.scotland.gov.uk/library/documents/diet-00.htm</p>	<p>This plan sets out the various steps producers, manufacturers, retailers, caterers, the NHS, local authorities and consumers can take on a voluntary basis to improve the Scottish diet. It was shaped by the publication in 1994 of a series of targets for dietary improvement in Scotland to be delivered over the decade to 2005. To meet these targets the plan made a list of key recommendations.</p>
<p><i>Improving Health in Scotland : The Challenge</i> (2003) http://www.scotland.gov.uk/Publications/2003/03/16747/19929</p>	<p>This document provides a wider framework for action to improving the health of the people of Scotland, especially those in the most disadvantaged communities at a faster rate. Healthy eating is one of seven special focus programmes which The Challenge focuses upon.</p>
<p><i>The Healthy Living Campaign</i> http://www.scotland.gov.uk/Topics/Health/health/19133/17952</p>	<p>This is an integrated programme of communication and public education to increase demand for, confidence in and skills for healthy eating within the context of a wider health improvement agenda.</p>
<p><i>Eating for Health: Meeting the Challenge</i> (2004)</p>	<p>This is a strategic framework for Food and Health developed through dialogue with partner organisations. Building upon the Scottish Diet Action Plan, the framework provides a basis to develop further food and health policy and to guide national and local health action plans. The paper also announced new leadership, communication and consultation structures in the form of a Scottish Food & Health Council and Healthy Living Food & Health Alliance.</p>
<p><i>School meals/Nutrition for the under fives</i></p>	<p>In 1993, the Scottish Executive introduced new nutritional standards for the provision of school meals under the banner of Hungry for Success - a whole school approach to be implemented in all primary schools by December 2004 and all secondary schools by December 2006. September 2006 saw the introduction of the new Schools (Health Promotion and Nutrition) (Scotland) Bill. Also in 2006 the Scottish Executive published nutritional guidance for early education and childcare settings for children aged 1 - 5.</p>
<p><i>'Lets make Scotland more active'- A strategy for physical activity</i> (2003). http://www.scotland.gov.uk/Publications/2003/02/16324/17895</p>	<p>This strategy contains a series of recommendations, including national targets for increasing physical activity levels in Scotland. The targets are to achieve 50% of adults aged over 16 and 80% of children aged 16 and under meeting the minimum recommended levels of physical activity by 2022. The Scottish Health Survey is being used to measure progress towards these targets</p>

Wales

<p><i>Food and Fitness – Promoting Healthy Eating and Physical Activity for Children and Young People in Wales: 5 Year Implementation Plan</i> http://new.wales.gov.uk/topics/health/improvement/food/action/?lang=en</p>	<p>The implementation plan was produced, following consultation, to communicate the actions which will be put in place to improve the nutrition and levels of physical activity and young people in Wales.</p>
<p><i>Food and Well Being: Reducing inequalities through a nutrition strategy for Wales</i> (2003) http://www.food.gov.uk/multimedia/pdfs/foodandwellbeing.pdf</p>	<p>The document sets out a nutrition strategy for Wales, outlining the actions required by key players to improve the diet of the people of Wales.</p>
<p><i>Climbing Higher : The Welsh Assembly Government Strategy for Sport and Physical Activity</i> (2005)</p>	<p>The document sets out the Welsh Assembly Government long term strategy for sport and physical activity for the next 20 years.</p>

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